

THE INTERVENTION OF STANDARD AND PERSUASIVE MESSAGES IN HEALTH PROMOTION EDUCATION TOWARD PRACTICES OF PREGNANT WOMEN IN THE DISTRICT OF BUOL

Nasrul,¹ Kartini Lasman,² Herman Sadiman³

ABSTRACT

Background: This research was about the maternal health practice effect of the persuasive messages in health promotion. The hypothesis was that the persuasive messages in health promotion enhance the maternal health promotion. **Methods:** The research was experimented with the pre-posttest control group design. The population was all pregnant women of the third trimester in sub district of Momunu and Lipunoto. Samples were selected by cluster sampling of 28 women. The data was analyzed by t-test and Wilcoxon test with degree of significance 95%. **Results:** Showed that both models in the maternal health promotion are significant in increasing the knowledge, attitude and practice from the pre and posttest ($p < 0.05$). The comparison of influences both types of intervention were not different ($p > 0.05$), but it suggests that the additional persuasive messages in health counseling are needed to inform importances of communication messages strategy and comprehensive message design in every health promotion activity.

Key words: persuasive, maternal health practice, health promotion standard

ABSTRAK

Penelitian ini adalah tentang pengaruh praktik kesehatan ibu dari pesan persuasif dalam promosi kesehatan. hipotesis adalah bahwa pesan-pesan persuasif dalam promosi kesehatan meningkatkan promosi kesehatan ibu. Penelitian ini bereksperimen dengan rancangan pra-postes kelompok. Populasi adalah semua ibu hamil trimester ketiga di Kecamatan Momunu dan Lipunoto. Sampel dipilih oleh cluster sampling dari 28 perempuan. Data dianalisis dengan t-test dan uji Wilcoxon dengan tingkat kepercayaan 95%. Hasil penelitian menunjukkan bahwa kedua model dalam promosi kesehatan ibu adalah signifikan dalam meningkatkan pengetahuan, sikap dan praktik dari sebelum dan sesudah ($p < 0,05$). Perbandingan pengaruh kedua jenis intervensi tidak berbeda ($p > 0,05$), namun menunjukkan bahwa pesan persuasif tambahan dalam penyuluhan kesehatan yang dibutuhkan untuk menginformasikan pentingnya strategi komunikasi pesan dan desain pesan yang komprehensif dalam setiap kegiatan promosi kesehatan.

Kata kunci: persuasif, praktik kesehatan ibu, standar promosi kesehatan

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INTRODUCTION

The maternal mortality rate in Indonesia is considered very high. The Indonesia demography survey of health year 1995 showed the maternal mortality rate was 373 per 100,000 live births, whereas the survey year 1997 showed that the rate was 334 per 100,000 live births. And result Indonesia demography survey year 2002–2003 showed that the maternal mortality rate was 307 per 100,000 per live births.

The maternal mortality rate in Central Sulawesi – 384 per 100,000 live births - was higher than that of the national. Area with the highest maternal mortality rate in Central Sulawesi is district of Buol is 693 maternal deaths per 100,000 live births. Though, the maternal mortality rate tends to decrease every year, it seems that it is quite difficult to achieve the national target 125 maternal deaths per 100,000 live births by 2010. According to Central Sulawesi Provincial Health office,

¹ Prodi D3 Keperawatan Palu Jurusan Keperawatan Poltekkes Depkes Palu, alamat e-mail: nasrulsaha@yahoo.co.id

² Jurusan Kebidanan Poltekkes Depkes Palu

³ Pusat Penelitian dan Pengembangan litbang Gizi Bogor Badan Litbangkes Depkes RI

Correspondence: E-mail: nasrulsaha@yahoo.co.id

coverage of the first visit (K1) in the district of Buol in 2002 was 96.4% while the coverage of K4 was 79.26% in which 74.77% deliveries were assisted by paramedic team and then decreased to 68.06% in 2005 (Indonesia Health Profile and Central Sulawesi Health Profile year 2006). It indicated that still about 31% maternal health service did not meet needs of pregnant women and delivering women.

A high maternal mortality rate indicates lack of people awareness towards health care, the nutrition of mothers and maternal health, environmental health, health service used by pregnant women and also health service at the time and after delivery. Furthermore, obstetric complications could contribute to the maternal mortality. According to Senewe and Sulistiyowati (2004), obstetric complication occurred to 20% of pregnant women. Yet, less than 10% were treated. Maternal mortality was also influenced by late referral in family level. The family role is important, particularly when to make a proper decision in every stage of the maternal condition. According to Freeman (Effendi, 2000), some of family's responsibilities in health are to identify health problems and to maintain or manage healthy condition in the family. One of causes in family delay on identifying danger and in deciding to refer pregnant women is the limitation of related knowledge, attitudes and also the practice of pregnant women and their family toward maternal health service. The health promotion up to now has not given much influence to motivate people, including pregnant women to have an optimum maternal health service. It was influenced by several factors, such as limited sources including materials and contents of health promotion, methods, media and health promotion staff in every local area. Therefore, it is important to make a revitalization on health promotion efforts by providing supplementary persuasive messages in each maternal health promotion in order to enhance knowledge, actions and attitudes of pregnant women and their family so that they are able to make a proper decision on each phase of the pregnancy condition. The researchers had previously applied a persuasive message and it succeeded to improve preventive attitudes on abusing addicted substances among high school students in City of Palu (Nasrul, 2002).

Based on the explanation above, this research proposed two models of health promotion as meant to provide information on tasks and responsibilities of

a family towards each pregnancy phase in order to enhance knowledge, attitudes and actions so that they try to get maternal health services. The intervention models employed are a health promotion through a standard health education conducted in the District of Buol and a health promotion education supplemented with persuasive messages by using a *fear arousing* approach. A *fear arousing* approach is an attempt to make mothers fear so that they are aware and are willing to seek proper health service. Materials of the health education were given in the form of lectures, leaflets containing persuasive messages such as pictures and risk warnings if mothers do not conduct pregnancy check up. The dangerous labor symptoms such are bleeding, dead fetus, misplacement, and having diseases during pregnancy, delivery and post delivery.

METHODS

The research was with an experimental design with the pre-post test control group (Praktiknya, 2000; Kerlinger, 2000). The first group was intervened with a standard health promotion education in the district of Buol, while the second group had a health promotion education supplemented with persuasive messages with materials in the form of leaflets. The intervention applied to both groups was conducted randomly. A standard health education was provided by a midwife in Buol, whereas a health education supplemented with persuasive messages by lecturers from Polytechnic of Health, Health Department in Palu.

The population of this research was all pregnant women on the third semester registered in the sampling location of public health Clinic in Buol who agreed to participate in the research and were permanent residents in the sites. Sample was taken by a *simple random sampling method*. The sample size of each group was taken from each population with the formula of sample size (Lemeshow et al., 1997):

$$n = \frac{2\sigma^2 (Z_{1-\alpha/2} + Z_{1-\beta})^2}{(\mu_1 - \mu_2)^2}$$

Notes:

n = Sample size

$Z_{1-\alpha/2}$ = Normal curve coefficient of significance level of 5% namely 1.96

$Z_{1-\beta}$ = Type 2 which will be researched is 0.20

σ = Variance of population on the previous research 3.58

$\mu_1 - \mu_2$ = expected difference from the previous research (22.40 – 23.18)

From the formula above, 28 samples were taken for each group. Data were collected by questionnaires which validity and reliability were tested before. Ethic consideration was applied to committee Ministry of Health Affairs. Samples were asked for informed consent were presented in tabulation and analysis was conducted using test of homogeneity of the two groups. Then, the differences of means of attitudes and knowledge were tested between the two groups by a t-test. For influence of the intervention towards maternal health service of each group was tested using Wilcoxon test on $p < 0.05$.

RESULT

The characteristics of respondents among pregnant women of the two groups are presented in Table 1:

Influence of the intervention toward knowledge

Respondent knowledge on pregnancy, delivery and post-delivery at pre and post-test is on figure 1.

Table 1. Characteristics of research respondents according to the public clinic origin

Characteristics	Lipunoto		Momunu	
	n	%	n	%
Age				
≤ 24 years	12	42.85	16	57.14
25–35 years	13	46.42	10	35.71
> 35 years	3	10.73	2	7.15
Education				
a. Drop out	1	3.57	11	39.28
b. Elementary school	13	46.42	10	3.71
c. Junior High school	9	32.14	4	14.28
d. Senior High school	5	17.87	3	10.73
Employment				
a. Farmers	1	3.57	11	39.28
b. Housewives	12	42.85	13	46.42
c. Public servants	7	25.00	2	7.15
d. in Private sectors	8	28.58	2	7.15

Resource: Primer data

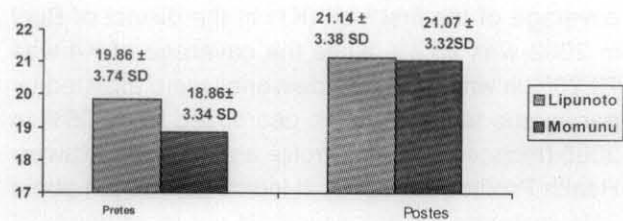


Figure 1. Influence of the intervention toward knowledge

Influence of the intervention toward attitude

The respondent attitude towards pregnancy, delivery and post delivery at pre and post-test is on figure 2.

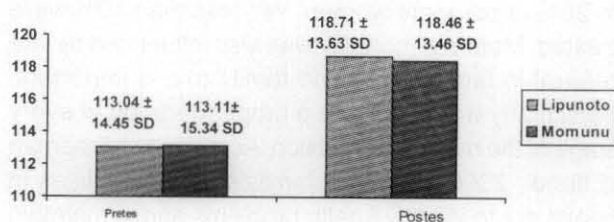


Figure 2. Influence of the intervention toward attitude

Influence of the intervention towards practice

The practice or the action of pregnant women towards pregnancy at pre and pos-test time is on figure 3.

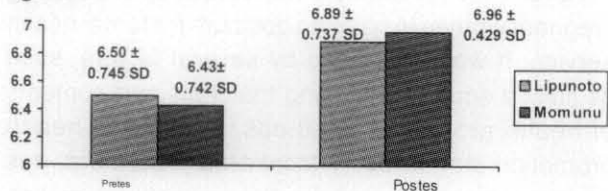


Figure 3. The comparison of influence of the intervention towards the action

Result of the Wilcoxon test towards the action or practice on the two groups of pregnant women regarding maternal health service showed significant $p < 0.50$. There was a significant influence from the intervention provided towards action change. Based on result of the third post test using the wilcoxon test, the difference between the standard

health promotion education treatment and the standards health promotion education supplemented with persuasive messages was not significant ($p > 0,05$).

DISCUSSION

Knowledge

In this research, the knowledge of respondents in the two groups is good. The increase of average scores in the group intervened was in accordance to theoretical framework developed as a message learning process (Azwar, 1998). The theory proposes that a message learning process requires attention comprehension, acceptance and retention. The pregnant women group intervened with a standard health promotion education showed an increase of 1.28 point whereas the pregnant women intervened with a standard health promotion education supplemented with persuasive message showed an increase of 2.21 point. Both groups had a significant increase compared to the pre-test condition ($p < 0.05$). The comparison of the influence between both health promotion models by t-test was not significant ($p > 0.05$), though there was a difference to post-test condition by 0.07 point.

The knowledge enhancement in the pregnant women group intervened with a standard health promotion education without persuasive messages could be due to a relatively higher education background compared to those intervened with persuasive messages. This is in accordance to Notoatmodjo (2005) that the higher one's education background is the better of his knowledge. The knowledge is a person's ability to memorize facts, symbols, procedures, techniques and theories.

The knowledge enhancement by a standard health promotion education without persuasive messages could be form educator behaviors that everyone has a potential to do a communication process. According to Mulyana (2007), one of communication principles is that every behavior has a communication and persuasion potential. When an educator gives a health education service, a communication process either directly or indirectly for change of behaviors take place. Besides, midwives employment as a standard health educator can also enhance the knowledge of pregnant women who did not receive persuasive messages. The enhancement is through an identification process in which more similar to social

cultural background of communicators or educators to the pregnant women so the communication will be more effective. This is associated to Mulyana (2007) that communication will be effective if the social cultural background of communicator is similar to one whom he talks to. The communication process is happened in both types of educations, according to Berger and Chaffee (1989) was recipients - pregnant women - would willingly pay attention when attending a health promotion education event. The message received by the two groups presented in the forms of communication symbols as a decoding process (Rahmat, 2000). A decoding process is interpretation and processing of information that include sensation, perception, memory and thought. A message through education was a sensation for the two groups which are then perceived in memory as a source for further actions and behaviors.

Attitudes

The results of Lavene test showed that respondents attitudes in the two groups at pretest were not different ($p > 0.05$). Most respondents showed positive attitudes towards maternal health. Effects of the two educational models showed a significant enhance towards the pregnant women's attitude ($p < 0.000$). The average increase of attitude on group intervened with a standard health promotion education is 0.25 point higher than that supplemented with persuasive messages because there was a stimulus in the form of leaflets and lectures which could affect attitude component cognitively. As stated Thurstone (Azwar, 1998) that attitude was an evaluation form or a sensation reaction. A person's attitude towards an object is an attitude of supporting (favorable) or not supporting (unfavorable) towards the objects. Comparison of the influence between the group intervened with a standard health promotion education and the group with a standard health promotion education supplemented with persuasive messages towards the attitude average increase score can be seen from t-test from the post test ($p = 0.05$).

Some causes of non significant differences towards attitude between the two models were situations during lecture, information source factors, and respondents education background. The communication source factor affected the group intervened with a standard health promotion education on the way that participants knew the educators

well enough because the educator was a midwife in Lipunoto area while educator from the other group was not midwife. Hogan (1997) stated that a friendship law applied to such a condition where one would be willing to do almost everything that his friends ask him to. The same thing happened to the lecture situation where there was a direct interaction between communicator and audience so that it can influence the attitude. The process of a positive attitude development in attempt to get proper maternal service was also influenced by social interaction process among pregnant women, including the interaction with the local midwife before the research conducted. Azwar (1998) mentioned that this happened due to social interaction experienced by individuals. The interaction was between message sources and source of recipient. Social interaction is likely to happen during a lecture because there are question and answer and discussion session in which two way communication between the communicator and the participant happen. Thus, there would be enhance on positive attitudes towards maternal health service and that was expected there would be social interaction between respondents and others to have access to maternal health service.

Other factors that can influence attitude are interaction law and persuasive expectation law. According to Hogan (1997), if someone gives a precious thing to others, people will respond it with a willingness to return the good deed and a tendency to do expectation from people they trusted. In this research, the researchers provided intervention explaining what pregnant women should do to take care of their health including their fetus.

Practice or action

The practice or action to have a health service among pregnant women on both groups were determined after all the respondents delivered babies by comparing to previous statements and the action after delivery. The practice or action measurement was from the examination during pregnancy, consumption of tablet Fe, Tetanus Toxoid imunizubis, consumption of nutritious food, first examination of pregnancy, location of examination and assistant on the delivery. Result of the research showed that most respondents from both groups (60.7%) had antenatal care examination in accordance with the K4 standard. Result of the Wilcoxon test showed that the effect of the two models

toward practice change based on the condition of pretest with the second post-test after delivery was significant ($p < 0.05$). While comparison of the effect between a standard health promotion education and a health promotion education supplemented with persuasive messages toward attitude change on the post test after delivery was not statistically different ($p > 0.05$). However, the group that received a standard health promotion education with persuasive messages increased value of action 0.14 point compared to the group without persuasive message.

The effect of the standard health promotion education and the standard health promotion education supplemented with persuasive messages supported a stimulus theory. According to Graeff et al. (1966) the effectiveness of communication depends much on input (stimulus) and output (response) given to stimulus. In this research, the input consists of message sources, messages, leaflet message, lectures, recipient characteristics and goals, whereas output in the form of knowledge, attitude and action. The change of preventive actions occurred because there were knowledge and attitude changes from a precondition for a change in health behaviors and other behaviors.

Furthermore, a change in the action which was not different between the two groups of pregnant women could be caused by awareness of pregnant women on their lives and their baby's lives. In addition, the distance factor from pregnant women residence to health facilities was also taken into consideration in a decision making to choose maternal health service (Notoatmojo, 2005). This can be seen from the fact that there were two pregnant women who received persuasive messages visited a hospital to undergo caesarian surgery. One of communication strategies is the use of persuasive message technique in the form of fear arousing then can cause worries among pregnant women, particularly when experiencing risky symptoms such as bleeding, fetus membran ruptur. If no quick action emergency, it can threaten the lives of mothers and the babies.

CONCLUSION

1. The influence of persuasive messages was not statistically different on the maternal health education towards knowledge and attitude action in comparasis to standard.

2. Persuasive messages enhanced the knowledge and practice better than non-persuasive messages.

SUGGESTIONS

1. Buol Health Department should intensively train public clinic staffs, particularly those who with similar culture as Buol community to be maternal health educators with varied communication strategies in order to improve knowledge, attitude and action towards a save motherhood action.
2. Researchers can develop a communication strategy design using sources, messages and media in a comprehensive health promotion. If possible, it should be standardized so that it can be used as a reference of effective and efficient health promotion activities.

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DIAGNOSTIC AND MEDICAL TREATMENT OF RABIES DISEASE IN HEALTH CENTER OF COMMUNITY

Raflizar¹

ABSTRACT

In Indonesia, Rabies is still considered as the most common zoonotic disease. It is not due to the number of death cases but to the number of human cases of human bitten by rabies virus infected animals or suspected ones. Most of human rabies cases caused by dog bites, besides cat and monkey bites. If rabies can be eliminated from dogs, rabies in cats and monkeys can also be eliminated as spontaneous rabies in these two animals are rare. Rabies is caused by an RNA virus from Rhabdoviridae Family and it attacks the central nervous system. It is almost invariably fatal if post-exposure prophylaxis is not administered prior to the onset of severe symptoms in unvaccinated people. Diagnose is based on the history of close contacts to infected saliva (via bites or scratches) and development of signs and symptoms. The early stage symptoms are fever, malaise, followed by agitation, abnormal behaviours, anxiety, hallucination, progressing to delirium, hypersalivation, hydrophobia, aerophobia, neurological symptoms such as pharynx spasm, paralysis, seizure, and finally death. Laboratory test to detect rabies virus in saliva can be done by a Reverse transcription followed by Polymerase Chain Reaction (RT/PCR) and virus isolation in cultured tissues. Skin biopsies of hair follicles at nape of the neck are examined for rabies antigen in cutaneous nerves at the base of hair follicles by immunofluorescence staining. The treatment after exposure are cleansing lesion, administering intradermal anti-rabies immunization to accelerate immune response, anti-rabies serum to stop infection process, intravenous and intraventricular ribavirin and alfa interferon, high concentration of ketamine infusion to inhibit rabies virus replication. At last, vaccination is the best prevention.

Key words: rabies, RNA-virus, vaccination, diagnosis, treatment

ABSTRAK

Di Indonesia, Rabies masih dianggap sebagai penyakit zoonosis yang paling umum. Hal ini bukan karena jumlah kasus kematian tetapi jumlah kasus manusia yang digigit oleh hewan yang terinfeksi virus rabies atau yang dicurigai. Sebagian besar kasus rabies manusia yang disebabkan oleh gigitan anjing, selain gigitan kucing dan kera. Jika rabies dapat dihilangkan dari anjing, rabies pada kucing dan kera juga bisa dihilangkan sebagai rabies spontan di dua binatang langka. Rabies disebabkan oleh virus RNA dari spesies Rhabdoviridae, dan menyerang sistem saraf pusat. Hal ini hampir selalu fatal jika profilaksis pasca paparan tidak diberikan sebelum timbulnya gejala parah pada orang tidak divaksinasi. Diagnosis didasarkan pada sejarah kontak dekat dengan air liur yang terinfeksi (melalui gigitan atau goresan) dan pengembangan tanda-tanda dan gejala. Gejala tahap awal adalah demam, malaise, diikuti oleh agitasi, perilaku normal, kecemasan, halusinasi, meluas ke delirium, hipersalivasi, penyakit anjing gila, aerophobia, gejala neurologis seperti kejang faring, kelumpuhan, kejang, dan akhirnya kematian. Uji laboratorium untuk mendeteksi virus rabies dalam air liur dapat dilakukan oleh Reverse transkripsi diikuti oleh Polymerase Chain Reaction (RT/PCR) dan isolasi virus dalam kultur jaringan. Biopsi kulit akar rambut di tengkuk diperiksa untuk antigen rabies di saraf kulit di dasar folikel rambut oleh immunofluorescence pewarnaan. Perlakuan setelah terkena adalah pembersihan lesi, pemilahan intradermal anti-rabies imunisasi untuk mempercepat respons imun, anti-rabies serum, menghentikan proses infeksi, intravena ribavirin, dan interferon alfa intraventricular, konsentrasi tinggi pada infus ketamin untuk menghambat replikasi virus rabies. Akhirnya, vaksinasi adalah pencegahan terbaik.

Kata kunci: rabies, RNA-virus, vaksinasi, diagnosis, perawatan

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¹ Centre of Biomedical and Pharmaceutical Research and Development, National Institute of Health Research and Development, Ministry of Health. Jl Percetakan Negara 29 Jakarta.
Correspondence: E-mail: raflizar66@yahoo.com